

chance of infection, but does not eliminate it. He suggests that increasing the outside ventilation rate could have a significant impact in reducing TB infection rates in office buildings. (2)

Dr. Harriet Burge reported that infectious illnesses that are spread by aerosols can spread more rapidly in poorly ventilated spaces. (3) She writes:

Airborne transmission usually occurs only when an infected subject is coughing, sneezing, or otherwise actively shedding fresh organisms into air close to susceptible individuals. In addition, when shedding occurs in poorly ventilated environments, levels can build to the point where susceptible subjects throughout an occupied space become infected. [authors emphasis]

In addition to increased ventilation, Dr. Nardell suggests that ultraviolet light may be effective in disinfecting the indoor air. (4) He writes:

Increased outdoor air ventilation is not the only way to disinfect building air. The ability of ultraviolet (UV) irradiation of the 254 nm wavelength to render indoor air noninfectious has been demonstrated in experimental exposure chambers, in experimental rooms, and, to a lesser extent, by field trials. Species of microorganisms vary in their susceptibility to UV irradiation, but many bacteria, including tubercle bacilli, and some airborne viruses are killed with levels of UV irradiation that

are both practical and safe for certain applications.

Dr. Nardell did not suggest that office buildings be equipped with UV fixtures for air disinfection. However, if a TB problem exists in a particular building, he feels that UV fixtures may supplement the protection afforded by outdoor ventilation.

A recent article in The New York Times reported on the potential spread of TB on commercial airliners. A Continental Airlines flight attendant with active TB reportedly infected 23 crew members who worked with her last fall on several international flights. While it was recommended that aircraft ventilation systems need to be designed with TB in mind, officials did not conclude that lack of fresh air was a factor in the infections caused in this particular incident. (5)

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